

**REMARKS**

Claims 1-5 are all the claims pending in the application. By this Amendment, Applicant amends claims 1 and 3-5.

**Preliminary Matters**

Applicant thanks the Examiner for acknowledging the claim of foreign priority under 35 U.S.C. § 119(a)-(d), and for initialing and returning the Form PTO/SB/08 submitted with the Information Disclosure Statement filed on February 13, 2006.

**Objection to the Specification**

**The specification is objected to because of a minor informality.**

Applicant amends the specification to cure the minor informality noted by the Examiner, and respectfully requests the Examiner to withdraw the objection in view of these self-explanatory amendments.

**Claim Rejections - 35 U.S.C. § 112**

**Claim 5 is rejected under 35 U.S.C. § 112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

Applicant amends claim 5 to cure the minor informality noted by the Examiner, and respectfully requests the Examiner to withdraw the rejection in view of these self-explanatory amendments.

**Claim Rejections - 35 U.S.C. § 103**

**Claims 1-4 are rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yun et al. (U.S. Pub. 2003/0223536, hereinafter “Yun”) in view of Hossain et al. (U.S. Patent 5,754,620, hereinafter “Hossain”).** Applicant respectfully traverses the rejection.

***Claim 1***

In the Office Action, the Examiner asserts that the combination of Yun and Hossain allegedly teaches all the features of claim 1.

Yun is directed to an element-specific imaging technique that utilizes element-specific fluorescence X-rays induced by primary radiation. *See* Yun, Abstract. Specifically, Yun discloses that a test object, such as an integrated circuit (IC) 10 of a semiconductor wafer 12, is irradiated by radiation 110 from a radiation generator 102 including an x-ray source 112. *See* Yun, ¶¶ 37, 39. Yun further discloses that radiation 116 from the element of interest, which is the IC 10 of wafer 12, is collected by a lens 118 to focus the radiation 116 onto a detector system 122. *See* Yun, ¶¶ 46-48.

Therefore, Applicant respectfully submits that the combination of Yun and Hossain fails to teach or suggest “an X-ray tube, having **a primary target**,” “**a secondary target** adapted to be irradiated with X-rays emitted from the X-ray tube,” and “wherein fluorescence X-rays selected from the group consisting of Be-K $\alpha$  line, Si-L line and Al-L line are emitted from the secondary target so as to impinge upon a diffraction grating, an artificial multilayer mirror or a filter, which is **an object to be evaluated**.” This is because the combination of Yun and Hossain does not disclose “a primary target,” “a secondary target,” and “an object” in combination with each other. Instead, at best, Yun discloses that the IC 10 of wafer 12 is an object to be evaluated. That is to say, the IC 10 in Yun is a portion of a material to be tested and is not a secondary

target for the EUV light source. Accordingly, Yun does not disclose that the radiation generator 102 and the IC 10 of wafer 12 are used as an EUV light source to examine “an object to be evaluated,” as required by the combination of features recited in claim 1.

Hossain is merely cited for teaching an x-ray tube that generates x-rays using an anode target. Therefore, even if Yun could have somehow been combined with Hossain, as the Examiner asserts in the Office Action, the combination would still not teach the combination of “an X-ray tube, having **a primary target**,” “**a secondary target** adapted to be irradiated with X-rays emitted from the X-ray tube,” and “wherein fluorescence X-rays selected from the group consisting of Be-K $\alpha$  line, Si-L line and Al-L line are emitted from the secondary target so as to impinge upon a diffraction grating, an artificial multilayer mirror or a filter, which is **an object to be evaluated**,” as recited in claim 1.

As a result, claim 1 and its dependent claims would not have been rendered unpatentable by the combination of Yun and Hossain for at least these reasons.

**Claim 5 is rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Yun and Hossain as applied to claim 1, and further in view of Sudo (JP 03-209156).**  
Applicant respectfully traverses the rejection.

Claim 5 depends on claim 1 and incorporates all the features of claim 1. Sudo is merely cited for teaching an artificial multilayer mirror. Even if Yun and Hossain could have somehow been modified based on Sudo, as the Examiner asserts in the Office Action, the combination would still not contain all the features of claim 1, and hence claim 5, as discussed above. Accordingly, claim 5 would not have been rendered unpatentable by the combination of Yun, Hossain, and Sudo for at least these reasons.

**Conclusion**

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

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